U.S. Department of the Interior
Bureau of Land Management
Kremmling Field Office
P.O. Box 68
Kremmling, CO 80459

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-120-2005-33-EA

PROJECT NAME: Wolford Technical Route

LEGAL DESCRIPTION:

T.1N.,	R.80W.,	Sec. 5
T.1 ½ N,	R.80W.,	Sec. 32
T.1 ½ N,	R.80W.,	Sec. 33
T.2 N.,	R.80W.,	Sec. 33

APPLICANT: Mountain Metal Mashers Jeep Club

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction: The proposed route location is located within the Wolford Mountain Travel Management Plan (WMTMP) area within the sub-area Wolford Mountain South. This sub-area contains high motorized use and is in close proximity to the town of Kremmling. Applicable management goals and objectives for this sub-area include providing for higher levels of motorized and non-motorized recreation opportunities while managing for user conflicts; restoring soil and vegetation health in areas of disturbed and eroded soils; maintaining and improving water quality; and protecting areas within the Lower Muddy Creek Mitigation Area and Cow Gulch.

The WMTMP was signed on January 21, 2005 and designated a Rock Crawl area within this sub-area to confine this use to a single location where it could be effectively managed. However, the plan stated that the site specific planning would be required once a proposed route has been designed. The Kremmling Field Office (KFO) received a detailed proposal for development, construction, and management of a technical route from the Kremmling Mountain Metal Mashers four-wheel drive club (hereafter referred to as the "club"). Thus, this environmental assessment (EA) is following through on this commitment.

The proposed route is also located within a high density play area that was designated in the WMTMP. The proposed route currently receives high use from ATVs and motorcycles. The BLM completed the Wolford Area Resource Protection Fence EA (CO-120-2005-44-EA) in the fall of 2005 which authorized the construction of 1500' of buck-n-pole fencing along portions of the route to better define the high use occurring along the route, deter users from creating new trails, and to prevent impacts from a recently inventoried cultural site. The Proposed Action also closed an open route that extended from the north east end of the drainage because it crossed a

recently inventoried cultural site. This project was implemented as a result of implementation of the WMTMP (signing the route designations) and BLM Interdisciplinary team (IDT) field work associated with the proposed rock crawl EA (CO-120-2005-33-EA). This project was completed as part of a 2005 National Public Lands Day (NPLD) project for Grand County in which the club, BLM staff, and volunteers participated in the construction of the fences.

During the BLM IDT preliminary planning and analysis of establishing a technical rock crawl route, the BLM determined that a 404 permit would be required because the proposed project would involve activities, including the discharge of fill material (i.e. rock and railroad ties), with the waters of the US (i.e. ephemeral drainage). Once the BLM obtained a nationwide 404 permit number 18 from the US Army Corps of Engineers, it proceeded with its analysis on the proposed project. Included with the permit were special conditions that were incorporated into the Proposed Action and Alternative #1.

The construction of the rock crawl route has also been proposed as a project for a 2006 Primedia event. Primedia is a group that promotes and sponsors 4x4 and OHV events across the nation. If the project is approved by the BLM and chosen by Primedia, they would fund the project's construction.

If the proposed route is approved, the club has committed to adopting it through an Adopt-a-Trail agreement. The club has also expressed a desire to provide a variety of services including financial support, labor, and equipment time. If approved, a formal written Adopt-a-Trail agreement would be established between the BLM and the club. The Adopt-a-Trail program would include:

- Assist the BLM in maintaining the trail.

- Help install and maintain the informational and directional signs, and signs concerning the Adopt-a-Trail program.

- Help design and develop interpretative materials to enhance the off-highway driving experience and educate the public about safety.

- Assist with designated route closures and reclamation.

- Monitor the trail for unacceptable resource damage and improper behavior. Should improper use of the trail occur, the club would be responsible for contacting the BLM KFO.

- Remove trash along the trail.

- Help promote the use of the Tread Lightly! Program.

- Provide the BLM with an annual report of all volunteer hours and activities.

- Gain prior authorization for all ground disturbing actions with the BLM prior to any work being performed, i.e. maintenance, major work days, etc.

Issues and Concerns: During the scoping period, comments were received from the Colorado Mountain Club and Western Resource Advocates regarding the Proposed Action and Alternative #1. General concerns that were raised included issues with geology, soils, and sedimentation; increased use and spillover effects; use projections; pre-decisional actions; compliance with the recently signed WMTMP; resource protection; reasonable range of alternatives; water protection and compliance with the Clean Water Act; monitoring and enforcement; and Purpose and Need. The BLM has considered these comments and addressed them throughout the EA.

Proposed Action: The Proposed Action is to create a technical four wheel drive route and parking area within the designated technical 4x4 area in the Wolford Mountain Travel Management Area. An informational kiosk and registration box to monitor use would also be constructed in the proposed parking area. The proposed route and parking area are located primarily on an existing route within the designated technical 4x4 area east of County Road 224 (see Attachment #1 for project map).

The entire route would be approximately 0.8 miles in length. Half of the proposed route is currently classified as a primitive open motorized route in the WMTMP. The northern portion of the route has evidence of use, though it did not appear in the original inventory. Thus, the Proposed Action would designate the northern portion of the route as an open, motorized route.

The club has proposed to modify the existing route by placing a series of rock and railroad tie obstacles along the route to create a technical rock crawl. Route modifications would consist of the construction of 9 rock obstacles. Rocks would be placed by manual and mechanical means including the use of winches, a small trailer towed by a modified Jeep, and by hand over the course of the summer of 2006. If winching points are to be used, it would be required that they are embedded in the rock obstacles.

If Primedia funds the construction of the obstacles, the construction would take place over the course of one weekend. The proposed rock obstacle locations are flagged and painted (in orange) on the ground and depicted on the project map. A set of drawings has been attached depicting each of the proposed obstacles with photographs of each location (see Attachment #2 for drawings and pictures).

The US Army Corps of Engineers has authorized the construction of the obstacles, totaling no more than 25 cubic yards of material below the ordinary high water line, under nationwide permit #18. As part of the permit, the following conditions would need to be followed:

-Prior to construction, a minimum of 5 monitoring sites would be established along the trail. Annual monitoring of those chosen sites would be conducted by the BLM once in use.

-It would be required that all rock crawling vehicles have a HazMat spill kit with them.

-The trail would also become closed during and following any precipitation event.

-The route would re-open once no moisture is found within the upper 12 inches of soil.

In addition to the Corps' conditions, the BLM would have additional recommendations and requirements that would need to be followed:

-BLM would recommend the route for travel by full-sized 4x4 vehicles that are modified specifically for rock crawling and are equipped with a winch and locking differentials.

-The route would be open for one-way travel only – bottom to top.

-Signage would be posted along the route to keep users from creating new trails.

-Upon exit of the route, the users would be required to follow signs on designated routes to take them back to County Road 224 (to the west), avoiding the disturbance of a cultural site.

Fencing constructed by the club and the BLM for the 2005 National Public Lands Day event, additional fencing that may be needed, and proposed signage along the route, would help to encourage users to stay on the trail. Access to the rock crawling route would be restricted by the placement of a difficult first obstacle along the route. At this time, there are no proposals for events at the location of the proposed rock crawling route. Site specific NEPA would be required for any future proposed events.

Alternative #1**:** This alternative is the same as the Proposed Action, with the exception of the northern portion of the proposed route. This alternative is to construct the obstacles along the existing designated route only. The number of obstacles would remain at 9, moving 2 of the upper obstacles from the Proposed Route over onto the Alternative Route (a designated route), and the trail length would remain at 0.8 miles. Users would then exit at a more western location along a designated route.

No Action Alternative: This alternative would not authorize the construction of the technical rock crawling route.

Alternatives Considered But Eliminated From Further Analysis: Other locations were identified by the BLM and the club as potential candidates for rock crawling routes, but they were not carried forward because they were not within the designated rock crawl area, and this particular route has existing obstacles and technical qualities that were desirable for rock crawling.

Building the obstacles in this location would require less construction than other locations. Additionally, one of the other potential routes was within the designated rock crawling perimeter, but was designated as closed in the WMTMP. The proposed location was identified and chosen as a suitable area for a technical rock crawling route in the WMTMP because of its proximity to town and the current use of the route.

During the scoping period, comments were raised regarding the need for the BLM to consider an alternative route on private lands. The BLM can not analyze the impacts of constructing a route on private land because we have no jurisdiction or authority to do so. In addition, we are not aware of any similar routes or experiences that exist on private lands with the Wolford Mountain area. Thus, a private land alternative was not analyzed as part of this EA.

PURPOSE AND NEED FOR THE ACTION: The BLM is specifically responding to a proposal from the club for the creation of a rock crawling route. The proposed route is located in an area that has been identified as acceptable for off-road vehicle use (Technical Jeep Route Area) in the 2005 WMTMP. The plan allowed for site-specific planning of the rock crawling route.

If the Proposed Action or Alternative #1 is approved, it would further BLM's objective identified in the1984 Kremmling Resource Management Plan to "ensure the continued availability of outdoor recreation opportunities which the public seeks and which are not readily available from other sources, to reduce impacts of recreational use on fragile and unique resource values, and to provide for visitor safety, and resource interpretation."

The proposed route would be the only one of its kind in the State of Colorado, as none have been designed for sustainability and constructed according to design. Other rock crawling opportunities exist in the state in Grand Junction (Billings Canyon), Penrose (Independence Trails), and near Montrose on naturally occurring rock outcrops. These opportunities are located in the western, southern, and southwestern parts of the state. These rock crawling routes utilize existing obstacles which have not been designed for sustainability as the Kremmling proposed route would. In addition, no rock crawling opportunities exist within the north-central or north-western part of the state.

It is the intent of the Proponents to stimulate and enhance the local economy of the Town of Kremmling by encouraging and fostering sustainable off-road vehicle based activities that are consistent with local, county, and federal plans. The Proponents believe the route is needed to provide increased opportunities for rock crawling in close proximity to the Town of Kremmling. If the Proposed Action or Alternative #1 is approved, the Proponent has expressed a desire to adopt the route through a formal Adopt-a-Trail agreement.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

> Name of Plan: Kremmling Resource Management Plan (RMP), Record of Decision (ROD)
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> Date Approved: December 19, 1984; Updated February 1999
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> Decision Number/Page: 7. a. page 11, 9. a. page 12.
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> Decision Language: Objective 7a: To ensure the continued availability of outdoor recreational opportunities which the public seeks and which are not readily available from other sources, to reduce the impacts of recreational use on fragile and unique resource values, and to provide for visitor safety, and resource interpretation.
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> Objective 9a: To protect fragile and unique resource values from damage by off-road vehicle (ORV) use and to provide ORV use opportunities where appropriate.
>
> Name of Plan: Wolford Mountain Travel Management Plan
>
> Date Approved: January 24, 2005

Decision Number/Page: Actions Common to All Alternatives, p. 14, 15

Decision Language: *Rock Crawl Area* – The Kremmling Field Office has received a request from a local OHV club for designation of an area for a technical four wheel drive trail and competitive rock crawls. The proposed location for this activity is in the vicinity of the proposed high-use play area and is shown on the alternative maps. Designating an area and allowing for this use would comply with the multiple use mandate of FLPMA, while confining this use to a single location where it could be effectively managed. A site specific environmental assessment would still be required upon receipt of a detailed use proposal by the group.

Decision Number/Page: p. 13 (Wolford Mountain South)

Decision Language: Management goals and objectives for this sub-area include providing for higher levels of motorized and non-motorized recreation opportunities, while managing user conflicts; protecting and improving Greater sage-grouse habitat; protecting and improving winter habitat; reducing or eliminating illegal dumping; restoring soil and vegetation health in areas of disturbed and eroded soils; maintaining and improving water quality; protecting riparian areas within the Lower Muddy Creek Mitigation Area and Cow Gulch; and protecting the sub-area's natural, cultural, and paleontological resources.

Standards for Public Land Health: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. The following are the approved standards:

Standard	Definition/Statement
#1 Upland Soils	Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, land form, and geologic processes. Adequate soil infiltration and permeability allows for the accumulation of soil moisture necessary for optimal plant growth and vigor, and minimizes surface runoff.
#2 Riparian Systems	Riparian systems associated with both running and standing water, function properly and have the ability to recover from major surface disturbances such as fire, severe grazing, or 100-year floods. Riparian vegetation captures sediment, and provides forage, habitat and bio-diversity. Water quality is improved or maintained. Stable soils store and release water slowly.
#3 Plant and Animal Communities	Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitat's potential. Plants and animals at both the community and population level are productive, resilient, diverse, vigorous, and able to reproduce and sustain natural fluctuations, and ecological processes.
#4 Threatened and Endangered Species	Special status, threatened and endangered species (federal and state), and other plants and animals officially designated by the BLM, and their habitats are maintained or enhanced by sustaining healthy, native plant and animal communities.
#5 Water Quality	The water quality of all water bodies, including ground water where applicable, located on or influenced by BLM lands will achieve or exceed the Water Quality Standards established by the State of Colorado. Water Quality Standards for surface and ground waters include the designated beneficial uses, numeric criteria, narrative criteria, and anti-degradation requirements set forth under State law as found in (5 CCR 1002-8), as required by Section 303(c) of the Clean Water Act.

Because a standard exists for these five categories, a finding must be made for each of them in the environmental analysis. These findings are located in specific elements below or in the Interdisciplinary Team Analysis Review Record and Checklist (IDT-RRC) (Appendix 1).

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

CRITICAL ELEMENTS: The following critical elements: Air Quality, Areas of Critical Environmental Concern, Environmental Justice, Farmlands- Prime and Unique, Floodplains, Native American Religious Concerns, Wild and Scenic Rivers, and Wilderness were evaluated and determined that they were not present or that there would be no impact to them from the Proposed Action, Alternative #1, or the No Action Alternative. See IDT-RRC in Appendix 1 for further information.

The following critical elements were determined to be potentially impacted and were carried forward for analysis from the IDT-RRC in Appendix 1.

CULTURAL RESOURCES

Affected Environment: A Class III, pedestrian cultural resource inventory has been completed for approximately 157 acres identified as the Area of Potential Effect (APE) for cultural resources within the proposed project area. Approximately 83 acres were previously inventoried for a livestock grazing permit renewal and other projects, resulting in the recording of two cultural sites and one isolated find. Approximately 74 acres of new inventory was completed specific to this project proposal resulting in the recording of two new cultural sites and one isolated artifact. Of these sites and isolated finds, only site 5GA3068 is recommended as needing additional data (evaluative testing) to determine eligibility to the National Register of Historic Places (NRHP). The remaining sites are evaluated as not eligible to the NRHP, and no further work is recommended. However, it is recommended that cultural sites 5GA3068 and isolated find 5GA3069 be combined into one site because of their close proximity and the deep soil deposits that likely connect the two sites, and may likely contain in-situ, buried cultural deposits.

Environmental Consequences: When sites 5GA3068 and 5GA3069 are combined into a single cultural site, 5GA3068, the site is recommended for avoidance and mitigation. The proposed return route would bisect cultural site 5GA3068 and repeated use would cause direct physical impacts to the site and likely cause increased vandalism and artifact theft.

Secondary impacts from informal and formal events staged at this location would likely include user developed hiking trails and viewing locations along the proposed route. A logical vantage point from which spectators can observe the greatest reach of the proposed technical route is directly located on sites 5GA3068 and 5GA3069.

Due to the proximity of the proposed technical route to a known cultural site, mitigation measures in the form of route closures are recommended (see below). If the route closures prove ineffective in preventing access, looting and vandalism, the Programmatic Agreement between BLM and the Colorado State historic Preservation Office calls upon BLM to take **immediate** action to prevent further degradation. If future funding becomes available, the site should be tested for eligibility to the NRHP, and if shown to be eligible, the site should be mitigated through data recovery excavation. In the meantime, the proposed mitigation of route closures would protect the site. Standard BLM cultural “discovery” stipulations are made part of this E.A. and authorization to proceed.

Mitigation:

-It is recommended that the proposed return route be abandoned in favor of a route that goes out to the north and west. Directional signage would be posted at the exit of the route to direct users back to the County Road and away from the cultural site.

-Signage clearly indicating where travel is allowed should be posted along the length of the route.

-Routes along the eastern periphery of the proposed technical route (approximately 1.23 miles) should be closed to further travel (See Attachment #3 for cultural mitigation map/proposed closures).

-Buck and rail fencing should be constructed at the end of each of these closed routes deterring motorized use.

-Routes that are closed leading to the cultural site would be rehabilitated by scarification and re-vegetation.

-BLM recreation staff would monitor the closures for fence modifications or route proliferation into the closed area.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: Currently, there are no known invasive, non-native species (weeds) within the project area. However, any ground disturbing activities, such as those associated with the Proposed Action, provide an avenue for weeds to become established.

Environmental Consequences: The ground disturbance associated with the Proposed Action or Alternative #1 could promote the establishment or spread of weeds through importation of weed seeds by the equipment used to construct the technical course and install the obstacles. After construction, there would be a continued threat of weed establishment and spread through continued use of the technical course.

Mitigation:

-During construction of the course, all construction equipment must be clean, especially the undersides, prior to entering the project area.

-The BLM would monitor the project area on an annual basis during the growing season for the establishment or spread of weeds. If weeds become established, control measures would be initiated through the BLM's partnership with the Grand County Weed Abatement Program.

MIGRATORY BIRDS

Affected Environment: The project area provides limited habitat for a variety of migratory birds including songbirds and birds of prey. The area has sagebrush steppe vegetation, with scattered Juniper and Douglas fir. The "Vegetation" section of this EA lists in detail the

vegetative species found in the proposed project area. However, much of the drainage area has steep bare slopes and very little habitat for migratory birds.

In general, more than 30 species of migratory birds have been documented in the sagebrush steppe vegetative type in Middle Park by the Colorado Bird Observatory (CBO) during 1991 field surveys. Some of the monitoring efforts that provided these results were conducted in sagebrush habitat located near the project area. In addition to bird counts, nests of 8 species of sagebrush dependent songbirds were located and monitored. The 4 most common nesting species located during this effort were sage thrasher, green-tailed towhee, Brewer's sparrow, and vesper sparrow. In 2005, the Rocky Mountain Bird Observatory (RMBO) conducted point-count surveys in sagebrush and riparian habitat within the Wolford Travel Management area. In sagebrush habitat, 36 species were documented and the 4 most common species remained the same. Due to the harsh climate of the project area, most migratory bird use is limited to summer. Birds arrive in the area during late spring and migrate from the area in early fall depending on weather conditions.

Environmental Consequences/Mitigation: The proposed project and Alternative #1 would eliminate less than a ½ acre of sagebrush habitat as a result of the proposed parking area. Since large expanses of sagebrush habitat exist in the proposed project area, the loss of ½ acre of habitat would be inconsequential and would therefore, not impact migratory birds.

The No Action Alternative would not allow the route modifications and no habitat would be lost. However, the route would still remain open and users would naturally park in and around the parking area. Improving the parking area with the removal of vegetation and defining the boundary would encourage users to park in the designated area rather than scattered along the route.

THREATENED, ENDANGERED, AND SENSITIVE SPECIES (includes a finding on Standard 4)

Affected Environment: A list of threatened, endangered, and candidate species that could inhabit the proposed project area was received from the U.S. Fish and Wildlife Service on February 25, 2005. The proposed route is within the range of the endangered species Osterhout milkvetch, *Astragalus osterhoutii*. The canyon was surveyed May 19th, 2005 and no individuals were found. No other listed species or BLM sensitive species inhabit the project area.

Environmental Consequences/Mitigation: The Proposed Action, Alternative #1, and the No Action Alternative would not impact Osterhout milkvetch, *Astragalus osterhoutii* or any known threatened, endangered, or sensitive species.

Finding on the Public Land Health Standard for Threatened & Endangered species: The proposed project area was not specifically assessed for compliance with this standard. The project area is small, thus it wouldn't affect Allotment # 07568 ability to meet this standard.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known significant quantities of wastes, hazardous or solid, located on BLM lands in the proposed area. However, the project area is in close proximity to the town of Kremmling and the Kremmling landfill, which provides easy access for

illegal dumping. As a result, new dump sites are discovered on the area's public lands each spring and summer. These dump sites typically consist of household wastes such as furniture, appliances, and building materials. Small quantities of hazardous materials such as motor fuels and oils are also not uncommon at these sites.

The opening of any area to use by motorized vehicles would result in an increase in solid waste disposal (in the form of litter) in that area. If the proposed rock crawl is approved, there would be the potential for hazardous waste in the form of fuel and oil spills from ruptured fuel tanks and oil pans.

Environmental Consequences: If the Proposed Action or Alternative #1 is approved, it would not likely result in the generation of major quantities of hazardous materials due to the fact that a typical oil pan would release several quarts of motor oil, while a ruptured fuel tank might release up to 30 gallons of gasoline or diesel fuel.

Since each rock crawl vehicle would be required to have a HazMat spill kit, spills would be cleaned up promptly. This would eliminate the possibility of contaminants being flushed down the drainage and into running water. A satisfactory way to mitigate spills of small amounts of fuel or oil is to move the contaminated soil out of the drainage, spread the soil out, build a small berm around the soil (to prevent rain water from washing the contaminants into nearby drainages), and allow the soil to be exposed to the hot summer temperatures. The high temperatures and natural soil microbes would reduce the contaminants to acceptable levels. Mixing or stirring the soil once or twice during the hot period of the year accelerates this process. Alternatively, contaminated soil can be removed and disposed of at the Kremmling landfill.

Clean up of fuels and oils must be accomplished according to state law and regulation. These problems would need to be addressed as they occur, but the risk from these hazards is probably no greater than on the rest of public lands where off-road vehicle use exists and where that hazard is rarely encountered. Most four-wheel drive vehicles have metal plates beneath the fuel tanks and oil pans which minimize the likelihood of oil pan or fuel tank ruptures.

Mitigation:

-Users would also be required to report spills that occur during fueling or as a result of the rupture of fuel lines and fuel tanks during operations to the BLM Kremmling Field Office. This requirement, along with the HazMat spill kit, would be posted in the parking area kiosk.

-Storage of fuel on site would be limited to a single days needs.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: The Proposed Action is located within the Muddy Creek 5th Order watershed, which is within the Upper Colorado River Basin. The route would be located in an ephemeral drainage that was tributary to Muddy Creek, approximately 3,000 feet downstream of the parking area. Grand County Road 225 crosses the drainage as it enters the Muddy Creek floodplain. The road appears to detain/alter the runoff's path onto the floodplain, and it does not appear that the drainage's sediment load reaches Muddy Creek. Additional information regarding the drainage is in the attached Water Quality Report (See Appendix 3).

This segment of Muddy Creek and its tributaries are identified in the 2006 Monitoring and Evaluation List for possible temperature impairments. They are also in the 2006 305(b) report as being assessed in 2003 and found fully supporting agricultural, recreational-primary contact, and domestic uses, but not supporting aquatic life- coldwater, class 1 due to water temperatures. The Monitoring and Evaluation List is for suspected impairment, but additional data are needed to determine if impairment exists, for which specific segments, and from what source(s). Temperature impairment could be from various factors, including reservoir operations, nutrient loading, riparian vegetation conditions, stream depletions, or a combination of factors.

There are no springs or seeps in or around the project area.

Environmental Consequences: The Proposed Action and Alternative #1 would not increase the length of roads or the road densities from those analyzed in the WMTMP. There is little difference in road length from the current open route (Alternative #1) and the Proposed Action. Both actions would limit the vehicle class allowed on the route to jeeps with specific equipment, which is expected to reduce the overall width of vehicle tracks. Currently, the route is mostly driven by jeeps and ATVs, but it is open to all motorized vehicles and the hill climb routes were made by motorcycles. These various vehicles drive the route differently, which has resulted in tracks throughout the channel bottom and sides. The obstacles are designed to provide a challenge and limit the available approaches, while keeping tires out of the drainage bottom. In addition, the rocks and wood walls within the obstacle are to be located to provide some “armoring” of the side slopes along the drainage.

The increased difficulty of the route could result in more oil or fluid spills in the drainage. However, the club’s adoption of the trail, the requirement of spill kits, and the drainage’s lack of continuity to Muddy Creek is felt to be sufficient to protect water quality.

Although no actual road is being constructed, there would be some surface disturbance. If the length of the route from the parking lot to the ridge is viewed as a “construction activity”, then the total possible disturbed acreage would be between 0.33-0.34 acres. If combined with the East Cow Gulch Trail Reroute, which is about 0.4 miles away, the new disturbance would be less than 0.7 acres, and would not require a Stormwater Phase II permit.

Ground water quality would not be impacted by the project.

Mitigation:

-The BLM has established 3 cross sections to monitor channel changes. Prior to construction, an additional 4 cross sections would be surveyed in. Cross sections would be re-surveyed yearly, and any observed channel changes evaluated to determine if the obstacles need to be altered or removed or other actions taken to reduce erosion.

-The depositional fan near the parking lot (downstream of the course) would be visually monitored for oil stained rocks. The Muddy Creek floodplain would be monitored for any evidence of flow from the drainage. If either concern is observed, then additional actions may be necessary to protect water quality.

-Depending on the amount of vehicle use, a designated refueling area could be established in or adjacent to the parking lot, away from the drainage, to help further protect surface and ground water quality. Due to the short length of the route, this is probably unnecessary, at least at this time.

Finding on the Public Land Health Standard for water quality: The BLM has had concerns for some time about overall watershed health in the Muddy Creek area. The area's grazing permits are being managed to improve watershed condition. The WMTMP implementation reduced routes within the watershed to help protect water quality. The Proposed Action and Alternative #1 do not increase the amount of routes approved in the Plan, and would not hinder the area's ability to move towards meeting or maintaining this standard.

NON-CRITICAL ELEMENTS: The following non-critical elements were determined to be potentially impacted and were carried forward for analysis from the IDT-RRC in Appendix 1.

SOILS (includes a finding on Standard 1)

Affected Environment: The Grand County Soil Survey maps the ephemeral drainage as almost entirely Harsha loam, 15-50% slopes, eroded. A small area (3.9 acres) of Tine cobbly sandy loam, 15-55% slopes is mapped near the top of the northwestern ridge. Due to the survey's scale, actual soil inclusions within the small drainage are not mapped. These Harsha loams are within the Dry Exposure range site and surface soil layers are shallow or partially eroded. Permeabilities are moderate and runoff amounts are low to moderate. Rates of runoff and water erosion hazards are dominated by slopes, and range from medium to high. Tine soils are formed in alluvial outwash, and have gravels and cobbles throughout their profile. The soils are generally sands within 2 feet from the surface and have rapid permeability. Besides slopes, limitations for trails include Harsha's low strength and Tine's large stones. Banks cut into Tine soils tend to cave in when saturated. More information about the slopes and soils within the drainage is included in the attached Water Quality Report (See Appendix 3).

Environmental Consequences: The ephemeral drainage has been driven by vehicles for about the last 15 years, with side routes and hill climbs being created by various users. The WMTMP closed the hill climbs within this drainage and during implementation of the WMTMP and review of this proposal; a side route was closed to protect cultural resources in the Wolford Area Resource Protection Fence EA (CO-120-2005-44-EA).

The Proposed Action and Alternative #1 would not alter soil impacts from those approved in the WMTMP. A technical route would limit the type of vehicle allowed on the route and the obstacles would further dictate how the drainage is driven. Depending on the location of the obstacles, some increased tire spin soil displacement could occur compared to the existing route. The portions that lack soil strength and vegetative cover would not have multiple routes up their steep side slopes. The post and pole fencing would also help to reduce this widening. By restricting vehicles from using the route during wet soil conditions, rutting would be reduced, which would help maintain current runoff pathways and reduce soil erosion. Additional soil impacts may occur depending on the number of vehicles using the route.

Mitigation:

-If Alternative #1 is selected, obstacles should be located on less than 20% slopes, unless sufficient anchoring of the obstacle can be achieved.

-Erosion control and seeding of closed routes within the drainage should be done to help stabilize slopes.

-Channel cross sections would monitor impacts of any increased vehicle use, and obstacle impacts to soils.

-If rutting occurs in the parking lot area, then an all weather surface is recommended for the lot.

Finding on the Public Land Health Standard for upland soils: The Wolford Travel Management Area is considered to be meeting this standard on a landscape scale, although specific areas still have erosion concerns. Implementing the WMTMP is one action to help insure the area continues to meet this standard. The Proposed Action and Alternative #1 would not increase the amount of routes within the drainage and limit the vehicle types from the present use. During construction, some additional soil disturbance would occur. The actual route would create a narrower "track" than currently driven, and the obstacles are designed to help keep tires off of more sensitive areas. The Proposed Action and Alternative #1 would not alter the overall area's ability to achieve this standard.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The area that would be disturbed by the proposed technical course is located in an intermittent stream bed with steep side slopes. The side slopes are devoid of vegetation in many areas because of the steepness of the slopes and poor soils. The vegetation consists of scattered juniper bushes and trees on the side slopes. A sagebrush steppe vegetation community makes up the areas around the juniper. The sagebrush steppe consists of an open big sagebrush stand with a sparse understory of grasses and forbs. The soil is poor quality and will not support a dense stand of vegetation. A small area dominated by greasewood is found at the bottom of the drainage.

Environmental Consequences/Mitigation: The Proposed Action and Alternative #1 would cause only a minor disturbance to the vegetation in the project area. Most of the area of concern consists of steep side slopes that would be outside of the area of disturbance. The drainage bottom, where almost all of the disturbance would occur, contains only scattered junipers and almost no understory of grasses and forbs.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): Allotment # 07568 (RCA) was rated as meeting this standard when it was assessed during the 1999 grazing permit renewal process. Since the project area is small, the Proposed Action or Alternative #1 would not effect Allotment # 07568 in respect to meeting this standard.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The proposed project area provides habitat for a variety of upland wildlife species ranging from small rodents to large herbivores and carnivores. Some of the more common species inhabiting the project area include bobcats, badgers, coyotes, mountain cottontail rabbits, white-tailed jackrabbits, several species of ground squirrels, voles, and mice. Three species of mammals classified as big game animals by the Colorado Division of Wildlife inhabiting the project area include mule deer, pronghorn antelope, and Rocky Mountain elk. The project area is sagebrush steppe vegetation, with scattered Juniper and Douglas fir. The Vegetation section of this EA lists the vegetative species found in the proposed project area. Much of the drainage area has steep bare slopes and very little forage for wildlife. Overall, the project area is used during winter by deer and elk and yearlong by the other species.

Environmental Consequences/Mitigation: The modification and use of this route would have a minor impact on wildlife populations that inhabit the area. Disturbance to select

individuals along the route would occur and any pools of spilled engine coolant could kill wildlife that drinks it. However, since each vehicle would be required to carry a Hazmat spill kit, and spills are required to be reported, the chances of wildlife death would be minimal. In addition, the Metal Mashers club has agreed to monitor the trail for unacceptable resource damage (including spilled coolant and/or oil) to further reduce the threat to wildlife. Overall, chance of fuel, coolant, and/or oil leaks within the drainage are projected to be infrequent and of small size. Possible mitigation in the event of a small spill is to have the party remove the contaminated soil or sediment.

The proposed project would eliminate less than a ½ acre of sagebrush steppe habitat as a result of the vehicle parking area. The placement of boulders on the route would not eliminate habitat; however, some disturbance would occur during the initial placement. The modifications to the route would increase the technical difficulty and be limited to users with advanced skills and certain vehicles capable of traversing the route. This may reduce the flow of traffic along the route and cause less impact to wildlife. Alternative #1 would have the same effect as the Proposed Action.

The No Action Alternative would not allow the modifications to the existing route and no disturbance to habitat would occur. Impacts to individual wildlife species would still occur since the route is designated as "open". Technical difficulty would be less, therefore allowing a wider range of users, and potentially an increase in traffic that would impact wildlife more than the Proposed Action or Alternative #1.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): The proposed project area was not specifically assessed for compliance with this standard. However, the project area is so small that it would not prevent Allotment # 07568 from meeting this standard.

PALEONTOLOGIC RESOURCES

Affected Environment: Both the proposed routes, and especially the commonly used routes (as noted from observed tracks) at the project area run through and into exposures of Tertiary Middle Park and Troublesome Formations. The routes, as flagged, largely stay off much (but not all) of the exposures and uses the wash alluvium. However, the routes as driven maneuver around many obstacles in the wash bottom traveling over the bedrock of these formations. Both of these formations are known to include fossil resources, with the Troublesome Formation commonly containing important and protected vertebrate fossils in the area.

A foot reconnaissance was made on 4/15/05 along the routes where a sizable piece of petrified wood was found weathered out of nearby exposures into the trail. In addition, numerous locales of bony fragmental material (both apparently in place and weathered out from the Tertiary Troublesome Formation) were found along the wash bottom and in the trails.

Environmental Consequences: The Proposed Action and Alternative #1 would cause disturbances in the project area over time. This would likely cause further erosion of these poorly cemented formations, causing the loss of any material that lies adjacent to the trail or that would weather off the steep nearby exposures and fall or wash onto the trail.

A detailed paleontologic clearance was made of the area in May, 2005, by Uinta Paleontological Associates, Inc. (UPA), and found no important in-place bone or other legally protected sites. A resource was identified near the general area though.

Under the No Action Alternative, Paleontological resources would continue to exist, or to weather out and collect in the area. Without the attention of an improved site, continued high use is anticipated in the area. This would cause moderate impacts to paleontological resources in the area.

Mitigation: In order to mitigate the potential impacts to paleontological resources in the project area, the UPA report recommended that modern bone debris (i.e. deer) be removed, the area be periodically monitored for new paleontological resources that would be revealed by escalated erosion.

In order to comply with this recommendation:

-Constructors should clean out any modern bone debris in the area at the time of initial construction; and

-An annual inspection for recently exposed paleontological material from surface erosion should be conducted by the BLM.

RECREATION

Affected Environment**:** The Wolford Mountain area has been used for intensive motorized recreation for many years. The 1984 RMP refers to the area as "Kremmling's back yard OHV playground" with numerous open roads and trails. The area provides opportunities for use by 4x4s, ATVs, and dirt bikes/trail bikes in both roaded and semi-primitive motorized settings. The RMP designated the area as "designated roads and trails", meaning any routes that existed in 1988 were designated as open. Any new route created after the Plan was signed was an illegally-created route. The 1988 OHV plan recognized the easy access from Kremmling and increasing use levels. This plan recommended a limitation to designated routes for all of the existing routes; however, it deferred closure of these routes until a complete inventory and analysis could be completed. The WMTMP decision (2005) reduced the amount of open routes in the area to protect resources and designated this specific area for development of technical rock crawling routes.

Four wheel drive vehicles, ATVs and motorcycles are increasing in popularity throughout the country. Statewide registrations of ATVs and motorcycles have increased dramatically since the registration program began in the early 1990s and this trend shows little sign of changing. Between the years of 1998 and 2003, retail sales of OHVs in Colorado increased by 115% (Motorcycle Industry Council, 2004). One-hundred thousand OHVs were registered in Colorado in 2004 (Tom Metsa, Colorado State Parks, personal conversation, 2004). Due to the increased levels of use over the years, many of the routes in the Wolford area that were used relatively infrequently are now receiving higher levels of use.

Non-motorized activities in the area include hiking, jogging, mountain biking and horseback riding. Big game hunting in the fall for antelope, mule deer, and elk is also very popular throughout the surrounding area. This is also one of the busiest times for OHV use as ATVs have become extremely popular with hunters. Most of the camping use in the area is associated with the hunting activity.

The proposed rock crawling route is defined in the Recreation Opportunity Spectrum (ROS) as Semi-Primitive Motorized. This classification affords the experiences of both motorized and non-motorized routes in a natural environment. The area has a moderate probability of experiencing solitude, a sense of closeness to nature in a predominantly natural appearing environment.

BLM has developed a number of guidelines and directives to better manage recreational use on public lands. The BLM's *National Management Strategy for Motorized Off-Highway Vehicle Use on Public Lands* provides goals and actions to improve management of OHVs on public lands and this travel plan follows those guidelines. This strategy specifically calls for field offices to provide OHV recreation sites to be used for destination-type facilities where demand exists. Colorado BLM has also developed the *Recreation Management Guidelines to Meet Public Land Health Standards on BLM Lands in Colorado* which provides direction on managing recreational uses to assure that the overall health of the public lands is maintained.

Environmental Consequences/Mitigation: The Proposed Action would increase rock crawling opportunities in north central Colorado and the local Kremmling area. Use is estimated to occur during the summer months (June, July, August, and September) and primarily by Kremmling locals (Mountain Metal Mashers). The Mountain Metal Mashers estimate local use of around 20 vehicles on weekends and potentially 2 vehicles during the week. The BLM anticipates that out-of-town use would increase once the route is discovered by other users. In addition, the Kremmling Chamber of Commerce and local motorized clubs are marketing the area as a motorized recreation destination. These marketing activities have the potential to increase use throughout the Wolford Mountain area. The proposed registration box would help the BLM monitor the use that would occur along with where the users would be coming from. Based upon observed visitor use logs kept from 2005, the majority of OHV use in the area is by dirt bikes and ATVs. These uses have already been limited in the proposed drainage, as most of the smaller side routes were closed in the WMTMP and physically closed with fencing during implementation of the WMTMP in September of 2005.

The proposed obstacles would essentially prohibit these smaller OHVs from traveling along this route, therefore over all use would decrease. Elimination of use by smaller vehicles would cause a minor negative impact to these users, however, other opportunities are available to ATVs and dirt bikes throughout the Wolford Mountain area. The proposed project would also open up a formerly closed route for travel. Additionally, 1.23 miles of routes will be closed as part of the project to protect a known cultural site. This would affect access to the upper end of the route, however other routes on the north upper end provide this access and recreational travel would not be affected.

The club would be responsible for maintenance and upkeep of the route as stated in the Background Information section of this document. BLM would also monitor the route and associated parking area for levels of use and any impacts. A registration box would be placed at

the trailhead for visitors to self-report their visitation and hometown so the BLM could gather use data on the site.

Alternative #1 would have the same impacts as the Proposed Action and would remain on a currently designated route, though the quality of the rock crawling experience would be diminished, as Alternative #1 is less challenging at the upper end.

The No-Action Alternative would not increase the recreational opportunities for rock crawling in the Wolford Travel Management Plan Area.

VISUAL RESOURCES

Affected Environment**:** The proposed project area is located in an area classified as VRM Class III. The objective of VRM Class III is to partially retain the existing character of the landscape. The level of change in any of the basic landscape elements (line, form, color, texture) due to management activities should be moderate, and not attract the attention of the casual observer.

Environmental Consequences/Mitigation: The proposed placement of obstacles along the length of the designated route would require the addition of large rocks and railroad ties. The Proposed Action would alter the visual and natural character of select segments of the existing, designated route. The majority of the project would not be visible from any high use route. The addition of large rocks and railroad ties would retain the same visual character; therefore the area would retain its Class III character.

Over time, some of the rock would show use by vehicles with black tire tracks and marred, broken rocks. Petroleum spills from leaking crankcases are also a potential visual impact, though users would be required to carry a Hazmat spill kit which should reduce visual impacts. Despite these impacts, the route would remain a Class III VRM managed area, as it is well-screened.

Alternative #1 would also alter the visual and natural character of selected segments of the existing route, and the Visual Resource Management Class would also remain a Class III.

The No-Action Alternative would maintain the natural character of the existing route and surrounding area.

ACCESS/ TRANSPORTATION

Affected Environment: The proposed project is within the boundaries of an area set aside in the WMTMP for extreme jeep activities. Current activities within this boundary include travel by 4x4s, ATVs, motorcycle, horse, and foot, as well as hunting, camping, and wildlife viewing.

Environmental Consequences/ Mitigation: The Proposed Action would affect both access and transportation. The construction of the obstacles would increase the technical difficulty level of the route. This would limit the number of users that would be capable of traveling through the relatively small area. It is likely that vehicles would be limited to those with locking differentials, winches, and other modifications.

The route would likely prohibit use by vehicles smaller than full-sized 4x4s with additional modifications. The route is short, equaling 0.8 miles in length. Other opportunities for smaller vehicles are available nearby, and another route exists to access the north end of the proposed route. The construction of the obstacles would not close off a large area. The closure of the 1.23 miles of routes at the upper, south end of the 4x4 route would also affect access however, other access is provided to the upper end of the 4x4 route via the north. Mountain Metal Mashers have agreed that these closures pose no problems.

Alternative #1 would affect both access and transportation the same as the Proposed Action.

The No-Action Alternative would not affect existing access or transportation.

SOCIO-ECONOMICS

Affected Environment: The proposed project is located in western Grand County, immediately north of the Town of Kremmling. An estimated 76% of Grand County's land base is public lands. Of this 76%, approximately 144,000 acres are BLM-administered public lands as compared to approximately 516,000 acres of U.S. Forest Service public lands. The estimated acreage of the proposed project from the parking area to the top ridge at the end of the route is approximately 0.34 acres.

In 2002, the estimated population of Grand County was 13,017. From 1970 to 2002, population grew by 8,790 people, a 208% increase in population. At an annual rate, this represents an increase of 3.6%. In 2000, the estimated population of Kremmling was 1,578. In 1990, the estimated population was 1,166. This represents a 35.3% change from 1990 to 2000 (Sonoran Institute, Economic Profile System, Grand County, Colorado 2005).

From 1970 to 2002, 8,504 new jobs were created in Grand County. A majority of these jobs were in the Service, Retail Trade, and Construction. From 1970 to 2000, Grand County added $241 million in personal income. The Services and Professional sector accounted for 48% of new income.

The Town of Kremmling's is referred to as "the sportsman's paradise" because of its four seasons of outdoor recreational activities such as its hunting, skiing, snowshoeing, snow mobiling, ice fishing, fishing, white water rafting, OHV riding, mountain biking, hiking, and horseback riding. The town still embodies "the way Colorado use to be" and is rich with western history and heritage. The town also serves a bedroom community for many of the resort towns in Grand and Summit County, such as Winter Park and Keystone.

Motorized-recreation on BLM-administered public lands is one of the most popular activities for the local population. In addition, the Kremmling Chamber of Commerce and local motorized clubs are marketing the area, including the public lands surrounding the town of Kremmling such as the Wolford Mountain Area, as a motorized recreation destination. This has the potential to increase out-of-town motorized use on BLM-administered public lands and bring additional revenue into the town.

As stated earlier in the "purpose and need" section, "It is the intent of the Proponents to stimulate and enhance the local economy of the Town of Kremmling by encouraging and

fostering sustainable off-road vehicle based activities that are consistent with local, county, and federal plans. The Proponents believe the route is needed to provide increased opportunities for rock crawling in close proximity to the Town of Kremmling."

Environmental Consequences/Mitigation: The Proposed Action and Alternative #1 would have a direct impact on the area's economy by bringing in additional tourism dollars which would benefit local businesses. There is currently no rock crawling opportunities within the north-central or north-western part of the state. This sport is growing in popularity as motorized recreation continues to increase throughout Colorado (see "recreation" section). Thus, there is a potential that the proposed route could attract additional visitors to the Town of Kremmling. The No Action Alternative would not have any economic impacts.

The Proposed Action, Alternative #1, and the No Action Alternative would not have any impact to the social structure or regional setting and character of the town.

CUMULATIVE IMPACTS SUMMARY: The WMTMP EA (CO-120-2004-14-EA) analyzed the cumulative impacts of the travel management plan. For the purposes of this analysis, this document is tiering to the cumulative impact summary section of CO-120-2004-14-EA. Tiering is used to prepare new, more specific or more narrow documents without duplicating relevant parts of previously prepared, more general, or broader documents, such as the WMTMP EA.

In summarizing the analysis from CO-120-2004-14-EA, the relevant issues in relation to cumulative impacts were the following:

How would this project affect the area's natural, cultural and paleontological resources given other past, present, and reasonably foreseeable actions in the surrounding area?

- What effect would the project have on soils quantity and quality?
- What effect would the project have on vegetation, including Osterhout milkvetch (*Astragalus osterhoutii*)?
- What effect would the project have on water quality?
- What effect would the project have on noxious weeds?
- What effect would the project have on migratory species that depend upon the project area for Critical Winter Range or for other sensitive time periods in their life-cycle?
- What effect would the project have on Greater sage-grouse and their habitat?
- What effect would the project have on the area's cultural and paleontological resources, both known and unknown?

How would this project affect the area's human community and socioeconomics given other past, present, and reasonably foreseeable actions in the surrounding area?

- What effect would the project have on motorized and non-motorized recreation?
- What effect would the project have on the area's quality of life and economics?

The geographic scope of the cumulative impact analysis for soils, water quality, and vegetation was the Muddy Creek and Troublesome Creek watershed. The direct and indirect impacts of the Proposed Action were less soil disturbance and compaction, and reductions in water channeling

and vegetation trampling within the project area due to the number of closed and reclaimed routes. Thus, there was a beneficial cumulative impact to these resources.

The geographic scope of the cumulative impact analysis for noxious weeds, wildlife, Greater sage grouse, cultural and paleontological resources, and motorized and non-motorized use was the entire North Park and Middle Park basins. The direct and indirect impacts of the Proposed Action were fewer disturbances to the projects area's populations of wildlife, Greater sage-grouse, cultural and paleontological resources, since motorized travel would be restricted to designated routes. Thus, there was a beneficial cumulative impact to these resources and uses.

The proposed rock crawl route is within this cumulative impact analysis area. If the route is approved, it would restrict the type and amount of use along the proposed route. In addition, the Proposed Action would close approximately 1.23 miles of previously open routes (1.23 miles would be closed and 0.2 miles of a new route would be opened) due to cultural resource concerns. Together, these actions would have a beneficial cumulative impact on the resources discussed above.

PERSONS / AGENCIES CONSULTED: Metal Mashers, Colorado Mountain Club, U.S. Army Corps of Engineers, BLM Grand Junction and Canyon City Field Offices, Colorado Division of Wildlife, Colorado Off-highway Vehicle Coalition.

INTERDISCIPLINARY REVIEW: See IDT-RRC in Appendix 1.

FONSI

CO-120-2005-33-EA

Based on the analysis of potential environmental impacts contained in the attached environmental assessment, and considering the significance criteria in 40 CFR 1508.27, I have determined that the Proposed Action will not have a significant effect on the human environment. An environmental impact statement is therefore not required.

DECISION RECORD

DECISION: It is my decision to authorize the Proposed Action as described in the attached EA.

This decision is contingent on meeting all mitigation measures and monitoring requirements listed below.

RATIONALE: The proposed route is located in an area that has been identified as acceptable for off-road vehicle use (Technical Jeep Route Area) in the 2005 WMTMP. The WMTMP allowed for site-specific planning of the rock crawling route. Thus, this analysis was following through on this commitment.

The Proposed Action furthers BLM's objective identified in the1984 Kremmling Resource Management Plan to "ensure the continued availability of outdoor recreation opportunities which the public seeks and which are not readily available from other sources, to reduce impacts of recreational use on fragile and unique resource values, and to provide for visitor safety, and resource interpretation." The proposed route will be the only one of its kind in the State of Colorado, as none have been designed for sustainability and constructed according to design. In addition, no rock crawling opportunities exist within the north-central or north-western part of the state.

The Proposed Action will also reduce the impacts of recreational use on fragile and unique resources in the area by incorporating mitigation and monitoring requirements. Specifically, the Proposed Action will close approximately 1.3 miles of previously open routes in the general project area to protect cultural resources. This will have a beneficial impact on the over-all public land health of the project area.

MITIGATION MEASURES:

Cultural Resources:

-The proposed return route in the Proposed Action will be abandoned in favor of a route that goes out to the north and west. Directional signage will be posted at the exit of the route to direct users back to the County Road and away from the cultural site.

-Signage clearly indicating where travel is allowed will be posted along the length of the route.

-Routes along the eastern periphery of the proposed technical route (approximately 1.23 miles) will be closed to further travel (See Attachment #3 for cultural mitigation map/proposed closures).

-Buck and rail fencing will be constructed at the end of each of these closed routes deterring motorized use.

-Routes that are closed leading to the cultural site will be rehabilitated by scarification and re-vegetation.

-The holder (Mountain Metal Mashers) is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for disturbing historic or archaeological sites, or for collecting artifacts.

-The holder (Mountain Metal Mashers) shall immediately bring to the attention of the Authorized Officer any and all antiquities, or other objects of historic, paleontological, or scientific interest including but not limited to, historic or prehistoric ruins or artifacts DISCOVERED as a result of operations under this authorization (16 U.S.C. 470-3, 36 CFR 800.112). The holder shall immediately suspend all activities in the area of the object and shall leave such discoveries intact until written approval to proceed is obtained from the Authorized Officer. Approval to proceed will be based upon evaluation of the object(s). Evaluation shall be by a qualified professional selected by the Authorized Officer from a Federal agency insofar as practicable (BLM Manual 8142.06E). When not practicable, the holder shall bear the cost of the services of a non-Federal professional.

-Within five working days the Authorized Officer will inform the holder as to:

-whether the materials appear eligible for the National Register of Historic Places;

-the mitigation measures the holder will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and

-a timeframe for the Authorized Officer to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the Authorized Officer are correct and that mitigation is appropriate.

-If the holder (Mountain Metal Mashers) wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the Authorized Officer will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the holder will be responsible for mitigation costs. The Authorized Officer will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the Authorized Officer that the required mitigation has been completed, the holder will then be allowed to resume construction.

-Antiquities, historic, prehistoric ruins, paleontological or objects of scientific interest that are outside of the authorization boundaries but directly associated with the impacted resource will also be included in this evaluation and/or mitigation.

-Antiquities, historic, prehistoric ruins, paleontological or objects of scientific interest, identified or unidentified, that are outside of the authorization and no associated with the resource within the authorization will also be protected. Impacts that occur to such resources that are related to the authorizations activities will be mitigated at the holder's cost.

-Pursuant to 43 CFR 10.4(g), the holder of this authorization (Mountain Metal Mashers) must notify the Authorized Officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4 (c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the Authorized Officer.

Invasive/Non-native species:

-During construction of the course, all construction equipment must be clean, especially the undersides, prior to entering the project area.

Wastes/Hazardous or Solids:

-Users will be required to report spills that occur during fueling or as a result of the rupture of fuel lines and fuel tanks during operations to the BLM Kremmling Field Office. This requirement, along with the HazMat spill kit, will be posted in the parking area kiosk.

-Storage of fuel on site will be limited to a single days needs.

Water Quality/ Surface and Ground:

-The BLM has established 3 cross sections to monitor channel changes. Prior to construction, an additional 4 cross sections will be surveyed in. Cross sections will be re-surveyed yearly, and any observed channel changes evaluated to determine if the obstacles need to be altered or removed or other actions taken to reduce erosion.

-Depending on the amount of vehicle use, a designated refueling area could be established in or adjacent to the parking lot, away from the drainage, to help further protect surface and ground water quality. Due to the short length of the route, this is probably unnecessary, at least at this time.

Soils:

-Erosion control and seeding of closed routes within the drainage will be done to help stabilize slopes.

-If rutting occurs in the parking lot area, then an all weather surface is recommended for the lot.

Paleontology:

-Constructors must clean out any modern bone debris in the area at the time of initial construction.

COMPLIANCE/MONITORING:

Cultural:

-BLM recreation staff would monitor the closures for fence modifications or route proliferation into the closed area.

Invasive/Non-native species:

- The BLM will monitor the project area on an annual basis during the growing season for the establishment or spread of weeds. If weeds become established, control measures will be initiated through the BLM's partnership with the Grand County Weed Abatement Program.

Water Quality/ Surface and Ground:

-The depositional fan near the parking lot (downstream of the course) will be visually monitored for oil stained rocks. The Muddy Creek floodplain will be monitored for any evidence of flow from the drainage. If either concern is observed, then additional actions may be necessary to protect water quality.

-Depending on the amount of vehicle use, a designated refueling area could be established in or adjacent to the parking lot, away from the drainage, to help further protect surface and ground water quality. Due to the short length of the route, this is probably unnecessary, at least at this time.

Soils:

-Channel cross sections will monitor impacts of any increased vehicle use, and obstacle impacts to soils.

Paleontology:

-An annual inspection for recently exposed paleontological material from surface erosion will be conducted by the BLM.

APPEAL OPPORTUNITIES:

Within 30 days of receipt of this decision, you have the right of appeal to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations at 43 CFR 4.400. Appeal and stay procedures are outlined in Form CO-050-1840-191.

NAME OF PREPARER: Stacey Antilla

NAME OF ENVIRONMENTAL COORDINATOR: Joe Stout

DATE: 5/10/06

SIGNATURE OF AUTHORIZED OFFICIAL: /s/ John F. Ruhs

DATE SIGNED: 5/15/06

ATTACHMENTS:

1). Project Map
2). Drawings and Pictures of Proposed Obstacles
3). Cultural Mitigation Map (Route Closures)

APPENDICES:

Appendix 1 – Interdisciplinary Team Analysis Review Record and Checklist
Appendix 2 – Bibliography
Appendix 3 – Water Quality Report

Appendix 1

INTERDISCIPLINARY TEAM ANALYSIS REVIEW RECORD AND CHECKLIST:

Project Title: Wolford Technical Route
Project Leader: Stacey Antilla
Date Proposal Received: 1998
Date Submitted for Comment: February 2005
Due Date for Comments: 3/15/06

Need for a field Exam: Multiple field exams were conducted by the BLM Interdisciplinary Team, Metal Mashers, and U.S. Army Corps of Engineers over the summer and fall of 2005.

Scoping Needs/Interested or Affected Publics: The Colorado Mountain Club, Western Resource Advocates, Mountain Metal Mashers Jeep Club. The project was listed on the Kremmling Internet NEPA Register and posted on the Kremmling Field Office NEPA Board.

Consultation/Permit Requirements:

Consultation	Date Initiated	Date Completed	Responsible Specialist/ Contractor	Comments
Cultural/Archeological Clearance/SHPO	2005	5/8/06	Rupp	See comments in EA.
Native American	4/19/05	5/19/05	Rupp	See comments below.
T&E Species/FWS	N/A	6/2/05	McGuire	N/A
Permits Needed (i.e. Air or Water)	9/28/05	1/10/06	Belcher	404 Permit required Stormwater Permit not needed

(NP) = Not Present
(NI) = Resource/Use Present but Not Impacted
(PI) = Potentially Impacted and Brought Forward for Analysis.

NP NI PI	Discipline/Name	Date Review Comp.	Initials	Review Comments (required for Critical Element NIs, and for elements that require a finding but are not carried forward for analysis.)
CRITICAL ELEMENTS				
NI	Air Quality **Belcher**	3/22/06	PB	No impact from the Proposed Action or Alternative #1
NP	Areas of Critical Environmental Concern **Stout**	1/12/06	JS	There are no Areas of Critical Environmental Concern in the proximity of the proposed project area.
PI	Cultural Resources **Rupp**	3/28/06	FR	See comments in EA.
NP	Environmental Justice **Stout**	1/12/06	JS	According to the most recent Census Bureau statistics (2000), there are no minority or low income communities within the Kremmling Planning Area.
NP	Farmlands, Prime and Unique **Belcher**	2/16/06	PB	There are no farmlands, prime or unique, in the proximity of the proposed project area.
NI	Floodplains **Belcher**	2/16/06	PB	Runoff from the Project Area would not affect the functionality or flood hazard of the Muddy

				Creek floodplain.
PI	Invasive, Non-native Species **Johnson**	5/5/05	RJ	See comments in EA.
PI	Migratory Birds **McGuire**	6/2/05	MM	See comments in EA.
NI	Native American Religious Concerns **Rupp**	6/6/05	FR	Native American consultation with the Northern, Southern and Ute Mountain Ute, the Arapaho,the Shoshone and the Colorado Commission of Indian Affairs was initiated on April 19, 2005. To date, the Southern Ute tribe is the only respondent who did not identify any conflicts or objections. Thus, there would be no impact to any known Native American religious concerns.
PI	T/E, and Sensitive Species (Finding on Standard 4) **McGuire**	5/23/05	MM	See comments in EA.
PI	Wastes, Hazardous and Solid **Homan**	3/25/06	RH	See comments in EA.
PI	Water Quality, Surface and Ground (Finding on Standard 5) **Belcher**	3/31/06	PB	See comments in the EA and Appendix 3.
NP	Wetlands & Riparian Zones (Finding on Standard 2) **Belcher**	2/16/06	PB	The Proposed Action and Alternative #1 are located entirely outside of any wetland or riparian zone. There would be no direct or indirect impact to wetland or riparian values from these actions.
NP	Wild and Scenic Rivers **Homan**	3/25/06	RH	There are no Wild and Scenic Rivers in the Kremmling Planning Area. An Eligibility and Suitability study will be conducted during the upcoming RMP Revision (2007).
NP	Wilderness **Antilla**	1/13/06	SA	There is no designated Wilderness or Wilderness Study Areas in the proximity of the proposed project area.
NON-CRITICAL ELEMENTS (A finding must be made for these elements)				
PI	Soils (Finding on Standard 1) **Belcher**	3/31/06	PB	See comments in EA and Appendix 3
PI	Vegetation (Finding on Standard 3) **Johnson**	5/5/05	RJ	See comments in EA.
NP	Wildlife, Aquatic (Finding on Standard 3) **McGuire**	5/23/05	MM	No aquatic wildlife exists within the project area. Thus, there would be no impacts. Finding: The proposed project area was not specifically assessed for compliance with this standard. However, the project area is so small that it would not prevent Allotment # 07568 from meeting this standard.
PI	Wildlife, Terrestrial (Finding on Standard 3) **McGuire**	6/2/05	MM	See comments in EA.
OTHER NON-CRITICAL ELEMENTS				
PI	Access/Transportation **Antilla**	1/13/06	SA	See comments in EA.
NI	Forest Management **Rosene**	1/17/06	RR	There would be no impacts to forest resources since the vegetation consists of scattered juniper bushes and trees on the side slopes, and a sagebrush steppe vegetation community makes up the areas around the juniper.
NI	Geology and Minerals **Morrone**	1/13/06	JM	No impacts
PI/ NP	Hydrology/Water Rights **Belcher**	3/31/06	PB	See comments in EA and Appendix 3. No impacts to water rights.
PI	Paleontology **Morrone**	6/2/05	JM	See comments in EA.
NI	Noise **Antilla**	1/13/06	SA	Noise levels would likely decrease, as the

				construction of these obstacles would limit the number of users that could use the route.
NI	Range Management **Johnson**	5/5/05	RJ	The proposed project area is in the RCA Allotment (07568) that is grazed by livestock from June 1 through June 30 each year. The project area is small and historically not used by livestock because of the steep side slopes and natural lack of vegetation. Thus, there would be no impacts.
NP	Lands/ Realty Authorizations **Cassel**	3/29/06	SC	No ROWs, leases, or permits are present in the location of the proposed action.
PI	Recreation **Antilla**	1/13/06	SA	See comments in EA.
PI	Socio-Economics **Stout**	4/10/06	JS	See comments in the EA.
PI	Visual Resources **Straub**	2/3/06	RS	See comments in the EA.
PI	Cumulative Impact Summary **Stout**	4/10/06	JS	See comments in the EA.
FINAL REVIEW				
	P&E Coordinator **Stout**	5/12/06	JS	
	Field Manager **Ruhs**			

Appendix 2

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Appendix 3

Water Quality Report **CO-120-2005-33-EA**
NEPA Compliance Record Rationale

The Wolford Technical Route Proposal requires an assessment of compliance with the Clean Water Act and the Colorado Land Health Standard #5. The proposed route would be located in an unnamed ephemeral drainage that is tributary to Muddy Creek, within the Upper Colorado River Basin. A review of Colorado's Nonpoint Source Assessment Report (plus updates), the 305(b) Report, the 303(d) List, the Monitoring and Evaluation List, and BLM field data was done to determine if water quality concerns exist. In addition, the miles of road and the specific runoff route were reviewed to summarize the potential impacts to soil and water resources. The discussion section provides a more detailed evaluation of the Proposed Action.

Summary: The Wolford Travel Management Plan (the Plan) decided that the existing route up the ephemeral drainage was open to motorized travel, except for a seasonal winter closure. The Proposed Action and Alternative #1 would encourage that the trail be used by technical jeep traffic only. The two proposals are very similar in total length (approximately 50-100 feet difference) so it is felt that impacts from the either route are within the scope of the Plan. The use of the area as a technical route is within the Plan's management objectives.

The proposed obstacles are designed to not alter current runoff pathways or sediment loads. The obstacles will reduce the amount of tire caused soil displacement within the drainage bottom, although they could increase the displacement on the downhill side of the obstacle. Currently, the route is open to use by all motorized vehicles, which results in a fairly wide route. The limit in vehicle type plus the obstacle placement will reduce the actual travel path within the drainage. Increases in sediment loads over current conditions would be dependent on the amount of vehicle use. The stair stepped slopes within the drainage bottom results in some depositional areas within the drainage (an example is just downslope from structure #3), and it appears that just upstream from the parking lot is another large depositional area. It does not appear that a runoff pathway to Muddy Creek is still in existence, so no increased sediment or contaminant load would reach surface waters. There are no springs or seeps in the area, and expected depth to ground water makes contamination unlikely. If needed, a refueling site could be designated at the parking lot location to further reduce groundwater concerns.

Temperature concerns in Muddy Creek would not be impacted by the Proposed Action. If the entire route length (under either action) is used to calculate new disturbance, the total acreage is about 0.33 acres. A Stormwater Phase II permit would not be required to permit the construction.

Background: The Proposed Action would occur within a small drainage area of about 67 acres. Approximately 16 acres are below the entrance to the technical route, with about 50.8 acres above the proposed parking lot. The ephemeral drainage is located northeast of Grand County Rd 224, within a larger area known as the RCA (Resource Conservation Area) Allotment.

RCA allotments were designated in the 1960s and used to demonstrate range improvement projects such as water developments, vegetation treatments and erosion control structures. Unfortunately after implementing many such projects, the livestock grazing numbers were greatly increased and the overall watershed conditions continued to decline. In the late 1970s, RCA livestock numbers were decreased and an allotment management plan (AMP) was developed. Additional objectives for the area were then identified in the Kremmling Resource Management Plan's Record of Decision (1984) under the Water Resources Management and the Off-Road Vehicle Management sections respectively:

-To protect and enhance sensitive watersheds in association with actions initiated by other resource programs. A planned action to meet this objective was to place restrictions on activities that could adversely affect them, with the Muddy Creek Watershed having the priority of sensitive watersheds.

-To protect fragile and unique resource values from damage by ORV use and to provide ORV use opportunities where appropriate. The Resource Conservation Area was identified for limited ORV use, restricting use to designated roads and trails.

The RCA area is close to the town of Kremmling and received some local motorcycle use and vehicle use in the 1980s. Most vehicle use occurred during the fall hunting seasons on the county road and on the two track roads in the area. The recreation program reviewed the area in the late 1980s in a travel plan and determined that resource damage was not occurring and no designations would be made at that time. As ORV popularity increased and all terrain vehicles appeared in the area, the BLM did not have the means to develop a travel management plan nor enforcement personnel to help implement it. In 2000, the BLM received funding to inventory roads and trails and began preparing a travel management plan for the Wolford Mountain area, which includes the RCA.

For the Plan, the Muddy Creek 5th order watershed was divided into many smaller drainage areas using GIS for soil and water analysis. The technical route's drainage is a "hydrologic response unit" (HRU) within drainage number #107. Drainage #107 is 477 acres, of which 441.2 are on public lands within the Travel Management Plan's boundary. During the route inventory process, approximately 10.9 miles of roads and trails were mapped within 107, most of which were ATV routes. This resulted in a road density of 0.016 acres of road/acre of 107, which was one of the higher densities within the travel management area. The 107 area is located in the southern portion of the Travel Management Area. Plan objectives for this southern area included higher road densities and more of a focus on motorized recreation than other areas. As a result of the plan, 3.6 miles of road were closed within the 107 area. Of the remaining 7.3 miles, 1.1 miles is a county road and 0.28 miles is a private road. The resulting road density is 0.013 acres of road/acre.

Analysis:

The preliminary proposal consisted of 11 obstacles, with obstacles varying from 3 to 40 rocks. The intent was to create a "staircase effect" resulting in vehicles having to climb up the drainage. Most of the obstacle designs consisted of a loose rock check dam, with the obstacles spanning the width of the drainage and having a height of about 4 ft high, for approximately 2000 cubic yards of material. The upper 2 structures were on slopes greater than 30%, and BLM was concerned about how to secure and anchor these structures. Due to channel type, construction requirements, and long term maintenance costs, it was determined that obstacles should not detain or alter runoff as much as possible. The Club and the BLM planned obstacles that are primarily above the high water line and eliminated the 2 higher obstacles on steep slopes. Total yardage was reduced to 20.5 cubic yards of material and the designs are attached to the environmental assessment.

The portion of the route that would be in the drainage would be about 3000 feet in length, with most of the route being designated for "open travel". The upper portion of the trail is considered a new route, although 2005 field visits found an established route. The new route is being considered to determine the most environmentally preferred route and to close the one with more impacts. Alternative #1's total length (from parking lot to top) is about 2950 feet in length. If either action is selected, there is little change in total route length or density for the drainage area from the Plan's final decision. Due to resource concerns that arose from field review of this proposal, approximately 615 feet of spur road into the drainage was fenced off in addition to closures decided on in the Plan. Some additional closures or reroutes may be necessary to fully protect other resource concerns. No increase of routes above the

Plan's decision is expected in drainage 107. The entire area is within a seasonal closure from December 15-April 30th for all motorized activity to protect big game wintering populations.

Soils: The drainage bottom's grade is naturally stair stepped, with steep portions interspersed with mild slopes. Zone engineers used GPS to estimate the proposed route's average grade as 13%, and the alternative route's grade as 11.5%. Surveying the length of each obstacle, the following grades were measured:

Structure 1	13.8%	Structure 6	20%
Structure 2	7.3%	Structure 7	18.3%
Structure 3	3.9%	Structure 8	15.4%
Structure 4	9.6%	Structure 9	16.7%
Structure 5	8.3%		

The initial portion of the alternate route is steep, with 30% slope at the first obstacle and 33.5% at the second obstacle.

Soils are mapped in the Grand County Soil Survey as almost entirely Harsha loams, 15-50% slopes, eroded. A small (3.7 acre) mapping unit of Tine cobbly sandy loam, 15-55% slopes is near the western ridgetop. The survey scale does not allow for distinguishing small soil inclusions, such as the "Little Moab" area. Harsha loams formed in local alluvium from sedimentary rocks. The surface layer is 2 inches, or in some cases, partially or entirely eroded. The subsoil is clay loam underlain by loam. Permeability is moderate and the soil has low strength. The soil is in hydrologic soil group B, and depending on slopes, runoff and erosion hazard can be high. Tine soils were formed in alluvial outwash and rock fragments make up between 20-80 percent of the volume. Gravels and cobbles increase with depth and the soil texture is an extremely cobbly sand within 2 feet from the surface. Permeability is rapid and surface runoff is medium. Soil slippage and stoniness are limitations for trails.

Hydrology: The 25-year, 6-hour storm for this zone is mapped as less than 1.5 inches. The 100-year, 24-hr precipitation is 2.4 inches. At the mouth of the confined channel near the proposed parking lot is a large deposit along the floodplain of 2-4 inch cobbles. The channel continues and joins with other ephemeral drainages. From the parking lot area to the county road is approximately 2,238 feet. In the past, the channel has deposited cobbles along the road. On the west side of the road is a large flat that is an old vegetative treatment site and a segment of Muddy Creek's floodplain. Muddy Creek itself is about 845-1060 feet from the county road.

Walking the road and the floodplain, there was no observable channel or deposits that appear to cross the floodplain. The current road condition includes a dirt berm on the "shoulder" that appears to retain runoff from the floodplain.

Using the NRCS's curve number method, the following storm flows were generated:

	Rock Course above parking lot (50.33 acres)	107 HRU (441.2 acres)	"Mine Shaft" drainage (952 acres)
Avg. Snowmelt	0.6 cfs peak flow 0.14 acre-ft runoff	2.27 cfs peak flow 0.34 acre-ft runoff	3.65 cfs peak flow 0.63 acre-ft runoff
25 yr, 6 hr storm	3.13 cfs peak flow 1.16 acre-ft runoff	11.73 cfs peak flow 7 acre-ft runoff	11.27 cfs peak flow 11.66 acre-ft runoff
100 yr, 24 hr storm	9.79 cfs peak flow 3.36 acre-ft runoff	57.75 cfs peak flow 23.59 acre-ft runoff	94.88 cfs peak flow 49.75 acre-ft runoff

Of interest, when using smaller HRUs within the Rock Course drainage, the northwestern (southern aspect) portion of the drainage generated between 39-64% of the runoff, depending on the storm and

parameters entered. This HRU includes several bare steep slopes with less vegetation than the northern aspects.

By constructing obstacles that are primarily out of the drainage channel, structures will not detain or retain expected runoff. If the initial design was pursued, structures would need to be spaced much closer to achieve the desired head-to-toe spacing. This means that the retained sediment of the first structure would be backed up to the toe of the next structure. Structures would also have to be keyed into the sidewalls and the channel bottom to help prevent runoff from eroding around or under the structure. Under current design, there should be much less installation and maintenance cost and concern.

Paula Belcher
March 31, 2006